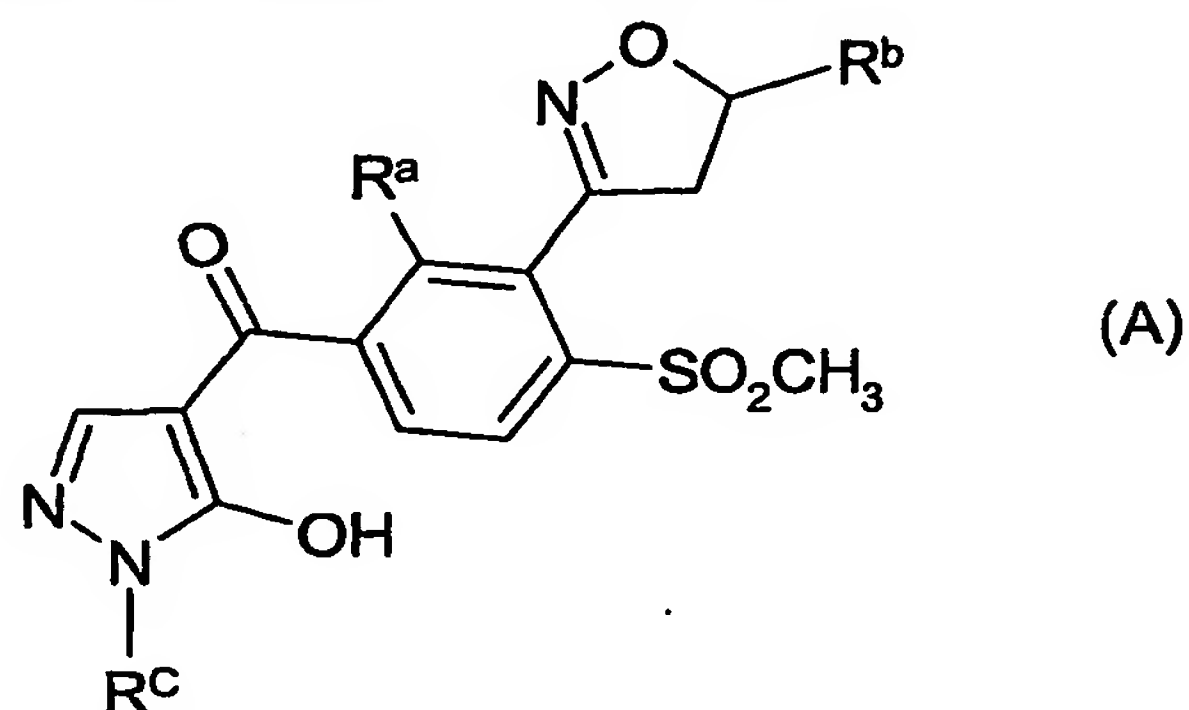


CLAIMS

1. A pesticidally active combination comprising an HPPD-inhibiting herbicide in the
 5 form of an agrochemically acceptable salt and an insecticide, provided that the HPPD-inhibiting herbicide is not a compound of formula (A)

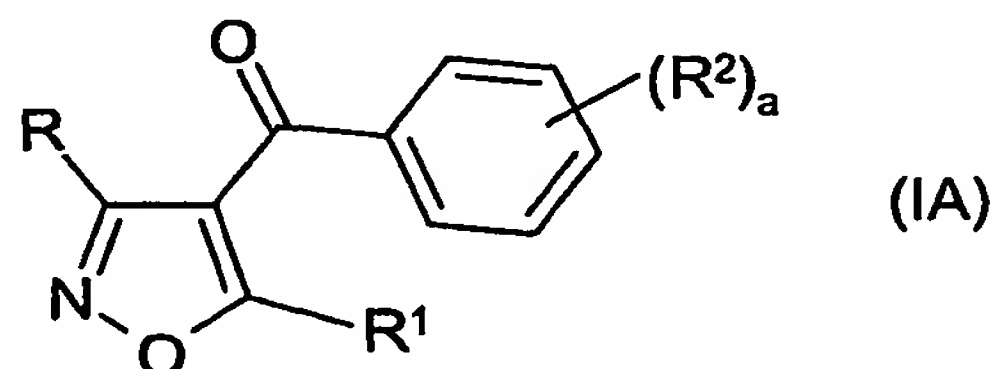


wherein R^a is C_{1-2} alkyl or chloro; R^b is hydrogen or C_{1-4} alkyl; and R^c is C_{1-4} alkyl.

10

2. A pesticidally active combination according to claim 1, wherein the HPPD-inhibiting herbicide is selected from the group consisting of isoxazole, triketones, pyrazoles, benzobicyclon and ketospiradox.

- 15 3. A pesticidally active combination according to claim 2, wherein the isoxazole is a compound of formula (IA)



wherein R is hydrogen or $-\text{CO}_2\text{R}^3$;

R^1 is C_{1-4} alkyl or C_{3-6} cycloalkyl optionally substituted by C_{1-6} alkyl;

20

R^2 is independently selected from halogen, nitro, cyano, C_{1-4} alkyl, C_{1-4} haloalkyl, C_{1-6} alkoxy, C_{1-4} haloalkoxy, $-(\text{CR}^4\text{R}^5)_c\text{S}(\text{O})_b\text{R}^6$, $-\text{S}(\text{O})_b\text{R}^6$, $-\text{OSO}_2\text{R}^6$ and $-\text{N}(\text{R}^7)\text{SO}_2\text{R}^6$;

or two groups R^2 , on adjacent carbon atoms of the phenyl ring may, together with the carbon atoms to which they are attached, form a 5- or 6-membered saturated or unsaturated heterocyclic ring containing up to three ring heteroatoms selected from nitrogen, oxygen and sulphur, which ring may be optionally substituted by one or more groups selected from
 5 halogen, nitro, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy and $-S(O)_bR^6$, it being understood that a sulphur atom, where present in the ring, may be in the form of a group $-SO-$ or $-SO_2-$;

R^3 is C_{1-4} alkyl;

R^4 and R^5 are independently hydrogen or C_{1-4} alkyl;

10 R^6 is C_{1-4} alkyl, or phenyl or benzyl, each of phenyl and benzyl optionally bearing from one or five substituents which may be the same or different selected from the group consisting of halogen, C_{1-4} alkyl, C_{1-4} alkoxy, C_{1-4} haloalkyl, C_{1-4} haloalkoxy, nitro and $-S(O)_bCH_3$;

R^7 is hydrogen or C_{1-6} alkyl;

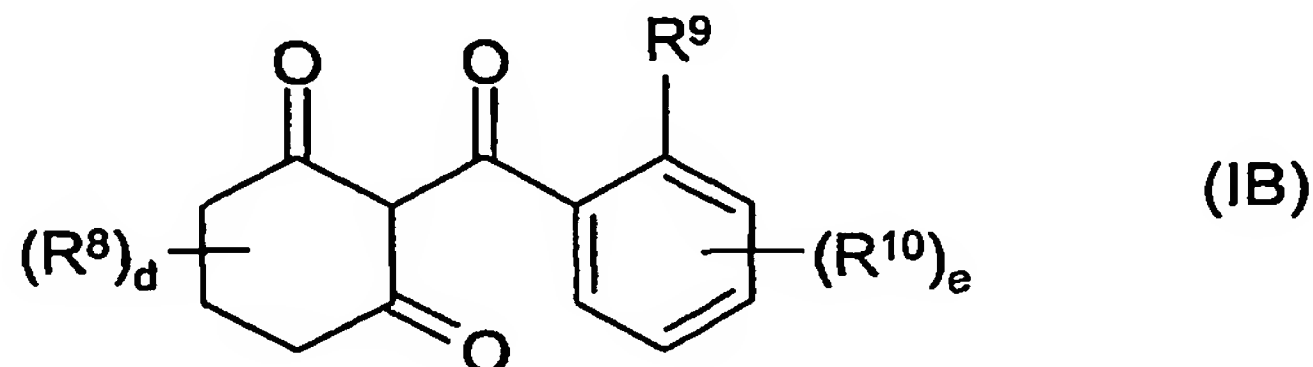
15 a is an integer from one to five;

b is zero, one or two; and

c is one or two (where c is two, the groups (CR^4R^5) may be the same or different.

4. A pesticidally active combination according to claim 3, wherein R is hydrogen; R^1 is
 20 cyclopropyl; R^2 is halogen (preferably chloro), $-S(O)_bCH_3$, or C_{1-4} haloalkyl (preferably trifluoromethyl); and a is two.

5. A pesticidally active combination according to claim 2 wherein the triketone is a compound of formula (IB),



25

wherein each R^8 independently represents (C_{1-4}) alkyl or $-CO_2R^{11}$;

R^9 represents a halogen atom; a straight- or branched-chain alkyl or alkoxy group containing up to six carbon atoms which is optionally substituted by one or more groups -OR¹² or one or more halogen atoms; or a group selected from nitro, cyano, -CO₂R¹³, -S(O)_fR¹², -O(CH₂)_gOR¹², -COR¹³, -NR¹³R¹⁴, -SO₂NR¹³R¹⁴, -CONR¹³R¹⁴, -CSNR¹³R¹⁴ and
5 -OSO₂R¹⁵;

each R¹⁰ independently represents halo, nitro, cyano, S(O)_fR¹⁶, OS(O)_fR¹⁶, C₁₋₆ alkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkyl, C₁₋₆ haloalkoxy, carboxy, C₁₋₆ alkylcarbonyloxy, C₁₋₆ alkoxycarbonyl, C₁₋₆ alkylcarbonyl, amino, C₁₋₆ alkylamino, C₁₋₆ dialkylamino having independently the stated number of carbon atoms in each alkyl group, C₁₋₆
10 alkylcarbonylamino, C₁₋₆ alkoxycarbonylamino, C₁₋₆ alkylaminocarbonylamino, C₁₋₆ dialkylaminocarbonylamino having independently the stated number of carbon atoms in each alkyl group, C₁₋₆ alkoxycarbonyloxy, C₁₋₆ alkylaminocarbonyloxy, C₁₋₆ dialkylcarbonyloxy, phenylcarbonyl, substituted phenylcarbonyl, phenylcarbonyloxy, substituted phenylcarbonyloxy, phenylcarbonylamino, substituted phenylcarbonylamino,
15 phenoxy or substituted phenoxy;

R¹¹ is C₁₋₄ alkyl;

R¹² represents a straight- or branched-chain alkyl group containing up to six carbon atoms which is optionally substituted by one or more halogen atoms;

R¹³ and R¹⁴ each independently represents a hydrogen atom; or a straight- or
20 branched-chain alkyl group containing up to six carbon atoms which is optionally substituted by one or more halogen atoms;

R¹⁵ represents a straight- or branched-chain alkyl, alkenyl or alkynyl group containing up to six carbon atoms optionally substituted by one or more halogen atoms; or a cycloalkyl group containing from three to six carbon atoms;

25 R¹⁶ represents a straight- or branched-chain alkyl group containing up to six carbon atoms which is optionally substituted by one or more halogen atoms;

d is zero or an integer from one to six;

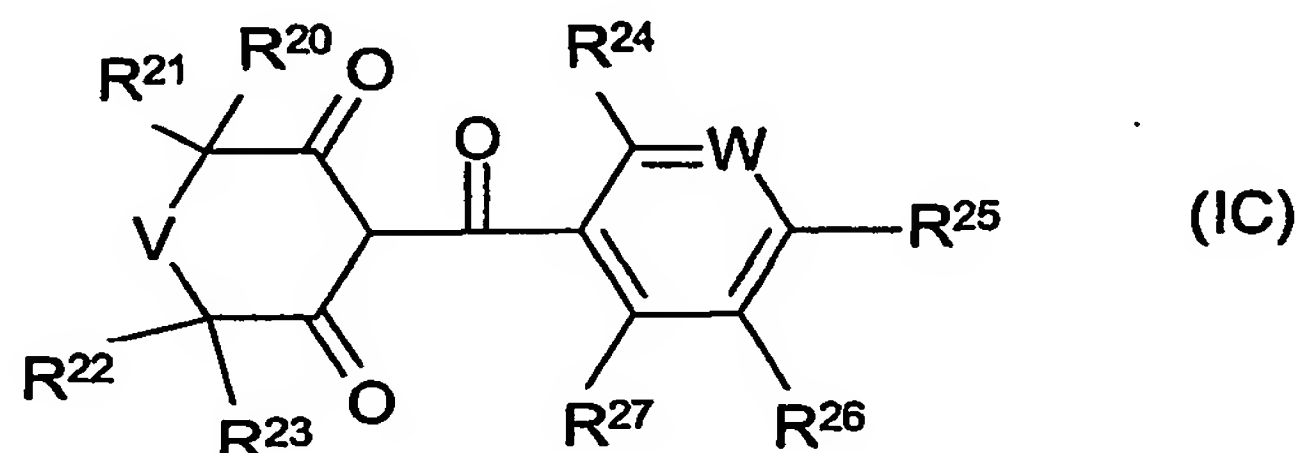
e is zero or an integer from one to four;

f is zero, one or two; and

g is one, two or three.

6. A pesticidally active combination according to claim 5, wherein R^9 is chloro, bromo, nitro, cyano, C_{1-4} alkyl, $-CF_3$, $-S(O)_f R^{12}$, or $-OR^{12}$; each R^{10} is independently chloro, bromo, nitro, cyano, C_{1-4} alkyl, $-CF_3$, $-OR^{12}$, $-OS(O)_f R^{16}$ or $-S(O)_f R^{16}$; d is zero and e is one or two.

7. A pesticidally active combination according to claim 2, wherein the triketone is a compound of formula (IC)



wherein V is C_{1-2} alkylene, which may be mono- or poly-substituted by R^{29} ; or, when R^{21} and R^{22} are other than C_{2-3} alkylene, W may additionally be carbonyl, oxygen or $-NR^{30}$;

W is CR^{31} or $N(O)_g$;

R^{20} , R^{21} , R^{22} and R^{23} are independently hydrogen, C_{1-4} alkyl, phenyl, C_{1-4} alkoxy, halogen, hydroxy, cyano, hydroxycarbonyl or C_{1-4} alkoxycarbonyl; or R^{21} and R^{22} together are C_{2-3} alkylene, which may be mono- or poly-substituted by R^{28} ;

R^{24} is hydrogen, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{1-2} alkoxycarbonyl- or phenyl-substituted vinyl, C_{2-6} alkynyl, C_{2-6} haloalkynyl, trimethylsilyl-, hydroxy-, C_{1-6} alkoxy-, C alkoxycarbonyl- or phenyl-substituted ethynyl, C_{3-6} allenyl, C_{3-6} cycloalkyl, halo- or C_{1-3} alkoxymethyl-substituted C_{3-6} cycloalkyl, C_{1-6} alkoxy, C_{3-6} alkenyloxy, C_{3-6} alkynyloxy, C_{1-6} haloalkoxy, C_{3-6} haloalkenyloxy, cyano- C_{1-4} alkoxy, C_{1-4} alkoxy- C_{1-4} alkoxy, C_{1-4} alkylthio- C_{1-4} alkoxy, C_{1-4} alkylsulfinyl- C_{1-4} alkoxy, C_{1-4} alkylsulfonyl- C_{1-4} alkoxy, C_{1-4} alkoxycarbonyl- C_{1-4} alkoxy, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, C_{1-6} haloalkylthio, C_{1-6} haloalkylsulfinyl, C_{1-6} haloalkylsulfonyl, C_{1-4} alkoxycarbonyl- C_{1-4} alkylthio, C_{1-4} alkoxycarbonyl- C_{1-4} alkylsulfinyl, C_{1-4} alkoxycarbonyl- C_{1-4} alkylsulfonyl, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, C_{1-3} alkoxy- C_{1-3} alkylamino, C_{1-3}

alkoxy-C₁₋₃ alkyl-N(C₁₋₃ alkyl), C₁₋₆ alkylaminosulfonyl, di(C₁₋₆ alkyl)aminosulfonyl, C₁₋₄ alkylsulfonyloxy, C₁₋₄ haloalkylsulfonyloxy, C₁₋₄ alkylsulfonylamino, C₁₋₄ alkylsulfonyl-N(C₁₋₄ alkyl), cyano, carbamoyl, C₁₋₄ alkoxycarbonyl, formyl, halogen, rhodano, amino, hydroxy-C₁₋₄ alkyl, C₁₋₄ alkoxy-C₁₋₄ alkyl, C₁₋₄ alkylthio-C₁₋₄ alkyl, C₁₋₄ alkylsulfinyl-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl-C₁₋₄ alkyl, cyano-C₁₋₄ alkyl, C₁₋₆ alkylcarbonyloxy-C₁₋₄ alkyl, C₁₋₄ alkoxycarbonyl-C₁₋₄ alkyl, C₁₋₄ alkoxycarbonyloxy-C₁₋₄ alkyl, rhodano-C₁₋₄ alkyl, phenyl-C₁₋₄ alkyl, phenoxy-C₁₋₄ alkyl, benzyloxy-C₁₋₄ alkyl, benzoyloxy-C₁₋₄ alkyl, (2-oxiranyl)-C₁₋₄ alkyl, C₁₋₄ alkylamino-C₁₋₄ alkyl, di(C₁₋₄ alkyl)amino-C₁₋₄ alkyl, C₁₋₁₂ alkylthiocarbonyl-C₁₋₄ alkyl or formyl-C₁₋₄ alkyl, or benzylthio, benzylsulfinyl, benzylsulfonyl, benzyloxy, benzyl, phenyl, phenoxy, phenylthio, phenylsulfinyl or phenylsulfonyl, wherein the phenyl-containing groups may themselves be substituted by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro; or

R²⁴ is a three- to ten-membered monocyclic or fused bicyclic ring system, which may be aromatic, saturated or partially saturated and may contain from 1 to 4 hetero atoms selected from nitrogen, oxygen and sulfur, wherein the ring system is bonded to the group W-containing aromatic ring by way of a C₁₋₄ alkylene, C₂₋₄ alkenylene or C₂₋₄ alkynylene bridge which may be interrupted by oxygen, -N(C₁₋₄ alkyl)-, sulfur, sulfinyl, sulfonyl or by carbonyl, and each ring system may contain no more than two oxygen atoms and no more than two sulfur atoms, and the ring system may itself be mono-, di- or tri-substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl, C₂₋₆ haloalkynyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₃₋₆ alkenyloxy, C₃₋₆ alkynyloxy, hydroxy, mercapto, C₁₋₆ alkylthio, C₁₋₆ haloalkylthio, C₃₋₆ alkenylthio, C₃₋₆ haloalkenylthio, C₃₋₆ alkynylthio, C₁₋₄ alkoxy-C₁₋₃ alkylthio, C₁₋₄ alkylcarbonyl-C₁₋₃ alkylthio, C₁₋₄ alkoxycarbonyl-C₁₋₃ alkylthio, cyano-C₁₋₃ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ haloalkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ haloalkylsulfonyl, aminosulfonyl, C₁₋₄ alkylaminosulfonyl, di(C₁₋₄ alkyl)aminosulfonyl, di(C₁₋₄ alkyl)amino, halogen, cyano, nitro, phenyl and/or by benzylthio, wherein phenyl and benzylthio may themselves be substituted on the phenyl ring by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro, and wherein substituents on the nitrogen in the heterocyclic ring are other than halogen; or

R²⁴ is the group -D₁-D₃ or the group -D₂-D₁-D₃;

R^{25} is hydrogen, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl, C_{2-6} haloalkynyl, C_{3-6} cycloalkyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, C_{1-6} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyl, C_{1-6} haloalkylthio, C_{1-6} haloalkylsulfinyl, C_{1-6} haloalkylsulfonyl, C_{1-6} alkylsulfonyloxy, hydroxy, mercapto, amino, C_{1-6} alkylamino, di(C_{1-6} alkyl)amino, C_{1-4} alkylsulfonylamino, C_{1-4} alkylsulfonyl- $N(C_{1-4}$ alkyl)-, C_{1-6} alkylaminosulfonyl, di(C_{1-6} alkyl)aminosulfonyl, cyano, halogen, C_{1-4} alkoxy- C_{1-4} alkyl, C_{1-4} alkylthio- C_{1-4} alkyl, C_{1-4} alkylsulfinyl- C_{1-4} alkyl, C_{1-4} alkylsulfonyl- C_{1-4} alkyl, triazolyl, phenyl, phenylthio, phenylsulfinyl, phenylsulfonyl or phenoxy, wherein the phenyl-containing groups may be substituted by C_{1-3} alkyl, C_{1-3} haloalkyl, C_{1-3} alkoxy, C_{1-3} haloalkoxy, halogen, cyano or by nitro;

R^{26} is hydrogen, C_{1-6} alkyl, hydroxy, C_{1-6} alkoxy, C_{1-6} haloalkoxy, C_{3-6} alkenyloxy, C_{3-6} haloalkenyloxy, C_{3-6} alkynyloxy, C_{1-4} alkylcarbonyloxy, C_{1-4} alkylsulfonyloxy, phenylsulfonyloxy, C_{1-4} alkylthio, C_{1-4} alkylsulfinyl, C_{1-4} alkylsulfonyl, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{1-4} alkoxycarbonyl, C_{1-4} haloalkyl, formyl, cyano, halogen, phenyl or phenoxy, wherein the phenyl-containing groups may themselves be substituted by C_{1-3} alkyl, C_{1-3} haloalkyl, C_{1-3} alkoxy, C_{1-3} haloalkoxy, halogen, cyano or by nitro; or

R^{26} is a three- to ten-membered monocyclic or, together with R^{25} or R^{27} , fused bicyclic ring system, which may contain from 1 to 4 hetero atoms selected from nitrogen, oxygen and sulfur, wherein, when the ring system is not fused, it is bonded to the W-containing aromatic ring, either directly or by way of a C_{1-4} alkylene, C_{2-4} alkenylene or C_{2-4} alkynylene bridge which may be interrupted by oxygen, $-N(C_{1-4}$ alkyl)-, sulfur, sulfinyl, sulfonyl or by carbonyl, and the ring system may contain no more than two oxygen atoms and no more than two sulfur atoms, and the ring system may itself be mono-, di- or tri-substituted by C_{1-6} alkyl, C_{1-6} haloalkyl, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl, C_{2-6} haloalkynyl, C_{1-6} alkoxy, C_{1-6} haloalkoxy, C_{3-6} alkenyloxy, C_{3-6} alkynyloxy, C_{1-6} alkylthio, C_{1-6} haloalkylthio, C_{3-6} alkenylthio, C_{3-6} haloalkenylthio, C_{3-6} alkynylthio, C_{1-4} alkoxy- C_{1-2} alkylthio, C_{1-4} alkylcarbonyl- C_{1-2} alkylthio, C_{1-4} alkoxycarbonyl- C_{1-2} alkylthio, cyano- C_{1-4} alkylthio, C_{1-6} alkylsulfinyl, C_{1-6} haloalkylsulfinyl, C_{1-6} alkylsulfonyl, C_{1-6} haloalkylsulfonyl, aminosulfonyl, C_{1-4} alkylaminosulfonyl, di(C_{1-4} alkyl)aminosulfonyl, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, halogen, cyano, nitro, phenyl and by/or benzylthio, wherein phenyl and

benzylthio may themselves be substituted on the phenyl ring by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro, and wherein substituents on the nitrogen in the heterocyclic ring are other than halogen;

R²⁷ is hydrogen, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl, C₂₋₆ haloalkynyl, C₃₋₆ cycloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₁₋₆ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ haloalkylthio, C₁₋₆ haloalkylsulfinyl, C₁₋₆ haloalkylsulfonyl, amino, C₁₋₆ alkylamino, di(C₁₋₆ alkyl)amino, C₁₋₄ alkylsulfonyl-N(C₁₋₄ alkyl)-, C₁₋₆ alkylaminosulfonyl, di(C₁₋₆ alkyl)aminosulfonyl, cyano, halogen, C₁₋₄ alkoxy-C₁₋₄ alkyl, C₁₋₄ alkylthio-C₁₋₄ alkyl, C₁₋₄ alkylsulfinyl-C₁₋₄ alkyl, C₁₋₄ alkylsulfonyl-C₁₋₄ alkyl, phenyl, phenylthio, phenylsulfinyl, phenylsulfonyl or phenoxy, wherein phenyl groups may themselves be substituted by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro;

R²⁸ and R²⁹ are each independently hydrogen, C₁₋₄ alkyl, phenyl, C₁₋₄ alkoxy, halogen, hydroxy, cyano, hydroxycarbonyl or C₁₋₄ alkoxycarbonyl;

R³⁰ is C₁₋₄ alkyl, alkoxycarbonyl or C₁₋₄ alkylcarbonyl;

R³¹ is hydrogen, C₁₋₆ alkyl, hydroxy, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₃₋₆ alkenyloxy, C₃₋₆ haloalkenyloxy, C₃₋₆ alkynyloxy, C₁₋₄ alkylcarbonyloxy, C₁₋₄ alkylsulfonyloxy, phenylsulfonyloxy, C₁₋₆ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ alkylamino, di(C₁₋₆ alkyl)amino, C₁₋₃ alkoxy-C₁₋₃ alkylamino, C₁₋₃ alkoxy-C₁₋₃ alkyl-N(C₁₋₃ alkyl)-, C₁₋₄ alkoxycarbonyl, C₁₋₆ haloalkyl, formyl, cyano, halogen, phenyl or phenoxy, wherein the phenyl-containing groups may themselves be substituted by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro;

or R³¹ is a three- to ten-membered monocyclic or, together with R²⁴ or R²⁵ fused bicyclic ring system, which may be interrupted once or up to three times by heterocyclic substituents selected from oxygen, sulfur, S(O), SO₂, N(R³²), carbonyl and C(=NOR³³), and wherein, when the ring system is not fused, it is bonded to the carbon atom of the substituent W, either directly or by way of a C₁₋₄ alkylene, C₂₋₄ alkenylene or C₂₋₄ alkynylene bridge which may be interrupted by oxygen, -N(C₁₋₄ alkyl)-, sulfur, sulfinyl or by sulfonyl, and the ring system may contain no more than two oxygen atoms and no more than two sulfur atoms, and the ring system may itself be mono-, di- or tri-substituted by C₁₋₆ alkyl, C₁₋₆

haloalkyl, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl, C₂₋₆ haloalkynyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₃₋₆ alkenyloxy, C₃₋₆ alkynyloxy, C₁₋₆ alkylthio, C₁₋₆ haloalkylthio, C₃₋₆ alkenylthio, C₃₋₆ haloalkenylthio, C₃₋₆ alkynylthio, C₁₋₄ alkoxy-C₁₋₂ alkylthio, C₁₋₄ alkylcarbonyl-C₁₋₂ alkylthio, C₁₋₄ alkoxycarbonyl-C₁₋₂ alkylthio, cyano-C₁₋₄ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ haloalkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ haloalkylsulfonyl, aminosulfonyl, C₁₋₄ alkylamino-sulfonyl, di(C₁₋₄ alkyl)aminosulfonyl, di(C₁₋₄ alkyl)amino, halogen, cyano, nitro, phenyl, benzyloxy and/or by benzylthio, and wherein the phenyl-containing groups may themselves be substituted on the phenyl ring by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro, and wherein substituents on the nitrogen in the heterocyclic ring are other than halogen;

or R³¹ is the group -D₄-D₆ or the group -D₅-D₄-D₆;

R³² is hydrogen, C₁₋₄ alkyl, C₁₋₄ alkylthio-C₁₋₄ alkylcarbonyl, C₁₋₄ alkylsulfinyl-C₁₋₄ alkylcarbonyl, C₁₋₄ alkylsulfonyl-C₁₋₄ alkylcarbonyl, C₁₋₄ alkoxycarbonyl, C₁₋₄ alkylcarbonyl, phenylcarbonyl or phenyl, wherein the phenyl groups may themselves be substituted by C₁₋₄ alkyl, C₁₋₄ haloalkyl, C₁₋₄ alkoxy, C₁₋₄ haloalkoxy, C₁₋₄ alkylcarbonyl, C₁₋₄ alkoxycarbonyl, C₁₋₄ alkylamino, di(C₁₋₄ alkyl)amino, C₁₋₄ alkylthio, C₁₋₄ alkylsulfinyl, C₁₋₄ alkyl-SO₂, C₁₋₄ alkyl-S(O)₂O, C₁₋₄ haloalkylthio, C₁₋₄ haloalkylsulfinyl, C₁₋₄ haloalkyl-SO₂, C₁₋₄ haloalkyl-S(O)₂O, C₁₋₄ alkyl-S(O)₂NH, C₁₋₄ alkyl-S(O)₂N(C₁₋₄ alkyl)-, halogen, nitro or by cyano;

R³³ is hydrogen, C₁₋₄ alkyl, C₃₋₄ alkenyl, C₃₋₄ alkynyl or benzyl;

h is 0 or 1;

D₁ is oxygen, -O(CO)-, -(CO)O-, -O(CO)O-, -N(C₁₋₄ alkyl)-O-, -O-N(C₁₋₄ alkyl)-, thio, sulfinyl, sulfonyl, -SO₂N(C₁₋₄ alkyl)-, -N(C₁₋₄ alkyl)SO₂-, -N(C₁₋₂ alkoxy-C₁₋₂ alkyl)SO₂- or -N(C₁₋₄ alkyl)-;

D₂ is a C₁₋₆ alkylene, C₃₋₆ alkenylene or C₃₋₆ alkynylene chain, which may be mono- or poly-substituted by halogen or by D₇, the unsaturated bonds of the chain not being bonded directly to the substituent D₁;

D₃ and D₆ are each independently of the other a C₁₋₈ alkyl, C₃₋₆ alkenyl or C₃₋₆ alkynyl group, which may be mono- or poly-substituted by halogen, hydroxy, amino, formyl, nitro, cyano, mercapto, carbamoyl, C₁₋₆ alkoxy, C₁₋₆ alkoxycarbonyl, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl, C₂₋₆ haloalkynyl, C₃₋₆ cycloalkyl, halo-substituted C₃₋₆ cycloalkyl, C₃₋₆

alkenyloxy, C₃₋₆ alkynyloxy, C₁₋₆ haloalkoxy, C₃₋₆ haloalkenyloxy, cyano-C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆ alkoxy-C₁₋₆ alkoxy, C₁₋₆ alkylthio-C₁₋₆ alkoxy, C₁₋₆ alkylsulfinyl-C₁₋₆ alkoxy, C₁₋₆ alkylsulfonyl-C₁₋₆ alkoxy, C₁₋₆ alkoxycarbonyl-C₁₋₆ alkoxy, C₁₋₆ alkoxycarbonyl, C₁₋₆ alkylcarbonyl, C₁₋₆ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ haloalkylthio, C₁₋₆ haloalkylsulfinyl, C₁₋₆ haloalkylsulfonyl, oxiranyl which may itself be substituted by C₁₋₆ alkyl, (3-oxetanyl)-oxy which may itself be substituted by C₁₋₆ alkyl, benzyloxy, benzylthio, benzylsulfinyl, benzylsulfonyl, C₁₋₆ alkylamino, di(C₁₋₆ alkyl)amino, C₁₋₄ alkyl-S(O)₂O, di(C₁₋₄ alkyl)aminosulfonyl, rhodano, phenyl, phenoxy, phenylthio, phenylsulfinyl or by phenylsulfonyl, and wherein the phenyl- or benzyl-containing groups may themselves be substituted by one or more C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, halogen, cyano, hydroxy or nitro groups; or

D₃ and D₆ are each independently of the other phenyl, which may be mono- or poly-substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, halogen, cyano, hydroxy or by nitro; or

D₃ and D₆ are each independently of the other C₃₋₆ cycloalkyl, C₁₋₆ alkoxy- or C₁₋₆ alkyl-substituted C₃₋₆ cycloalkyl, 3-oxetanyl or C₁₋₆ alkyl-substituted 3-oxetanyl; or

D₃ and D₆ are each independently of the other a three- to ten-membered monocyclic or fused bicyclic ring system, which may be aromatic, saturated or partially saturated and may contain from 1 to 4 hetero atoms selected from nitrogen, oxygen and sulfur, wherein the ring system is bonded to the substituent D₁ or D₄ directly or by way of a C₁₋₄ alkylene, C₂₋₄ alkenylene, C₂₋₄ alkynylene, -N(C₁₋₄ alkyl)-C₁₋₄ alkylene, -S(O)-C₁₋₄ alkylene or -SO₂-C₁₋₄ alkylene group, and each ring system may contain no more than two oxygen atoms and no more than two sulfur atoms, and the ring system may itself be mono-, di- or tri-substituted by C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl, C₂₋₆ haloalkynyl, C₁₋₆ alkoxy, hydroxy, C₁₋₆ haloalkoxy, C₃₋₆ alkenyloxy, C₃₋₆ alkynyloxy, mercapto, C₁₋₆ alkylthio, C₁₋₆ haloalkylthio, C₃₋₆ alkenylthio, C₃₋₆ haloalkenylthio, C₃₋₆ alkynylthio, C₁₋₃ alkoxy-C₁₋₃ alkylthio, C₁₋₄ alkylcarbonyl-C₁₋₂ alkylthio, C₁₋₄ alkoxycarbonyl-C₁₋₂ alkylthio, cyano-C₁₋₃ alkylthio, C₁₋₆ alkylsulfinyl, C₁₋₆ haloalkylsulfinyl, C₁₋₆ alkylsulfonyl, C₁₋₆ haloalkylsulfonyl, aminosulfonyl, C₁₋₂ alkylaminosulfonyl, di(C₁₋₂ alkyl)aminosulfonyl, di(C₁₋₄ alkyl)amino, C₁₋₆ carbonylamino, halogen, cyano, nitro, phenyl, benzyloxy and/or by benzylthio, wherein

the phenyl groups may themselves be substituted on the phenyl ring by C₁₋₃ alkyl, C₁₋₃ haloalkyl, C₁₋₃ alkoxy, C₁₋₃ haloalkoxy, halogen, cyano or by nitro, and wherein the substituents on the nitrogen in the heterocyclic ring are other than halogen;

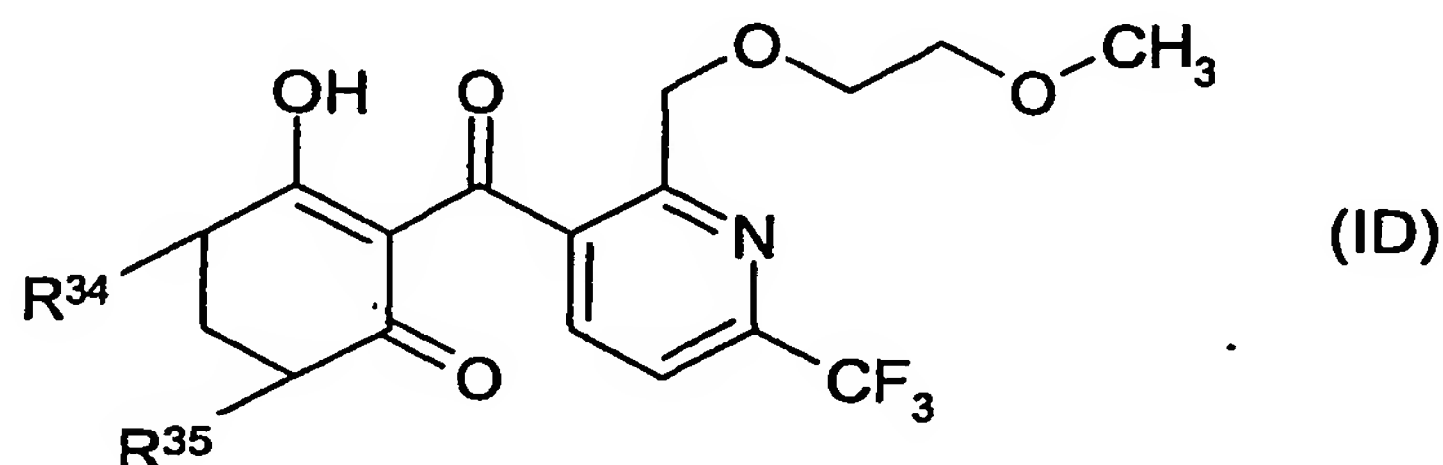
D₄ is oxygen, -O(CO)-, -(CO)O-, -O(CO)O-, -N(C₁₋₄ alkyl)-O-, -O-N(C₁₋₄ alkyl)-, sulfur, sulfinyl, sulfonyl, -SO₂N(C₁₋₄ alkyl)-, -N(C₁₋₄ alkyl)SO₂-, -N(C₁₋₂ alkoxy-C₁₋₂ alkyl)SO₂- or -N(C₁₋₄ alkyl)-;

D₅ is a C₁₋₆ alkylene, C₃₋₆ alkenylene or C₃₋₆ alkynylene chain, which may be mono- or poly-substituted by halogen or by D₈, the unsaturated bonds of the chain not being bonded directly to the substituent D₄;

D₇ and D₈ are each independently of the other hydroxy, C₁₋₆ alkoxy, (C₃₋₆ cycloalkyl)oxy, C₁₋₆ alkoxy-C₁₋₆ alkoxy, C₁₋₆ alkoxy-C₁₋₆ alkoxy-C₁₋₆ alkoxy or C₁₋₆ alkylsulfonyloxy;

and agronomically acceptable salts/N-oxides/isomers/enantiomers of such compounds.

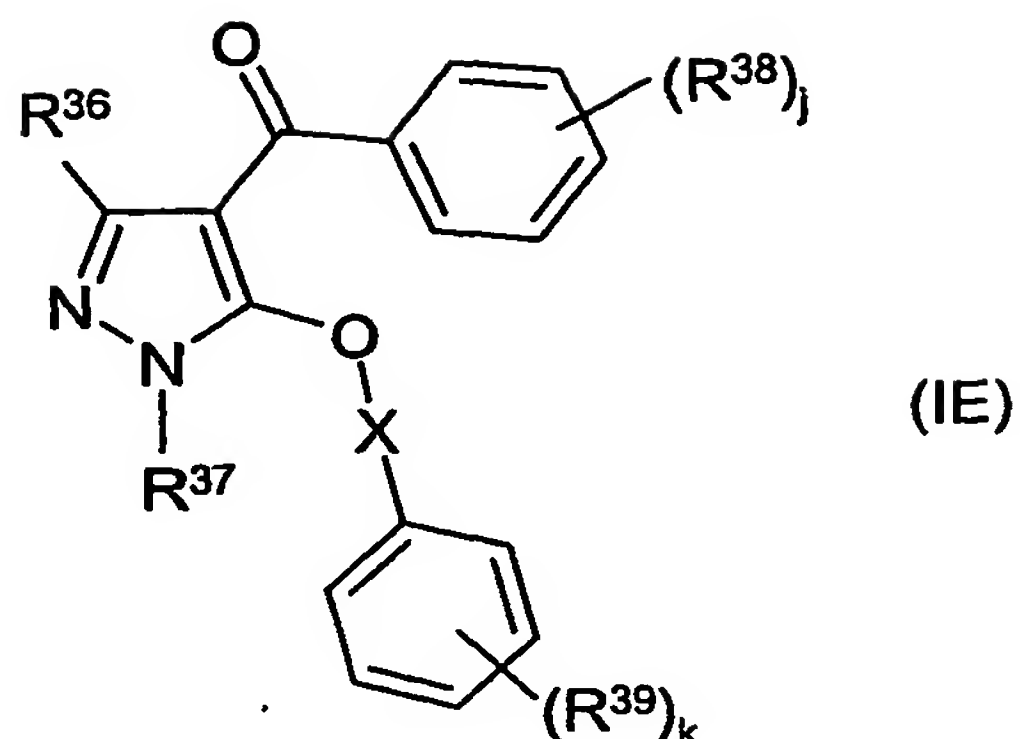
8. A pesticidally active combination according to claim 2, wherein the triketone is a compound of formula (ID)



wherein R³⁴ and R³⁵ are both hydrogen or together form an ethylene bridge.

9. A pesticidally active combination according to claim 2, wherein the pyrazole is a compound of formula (IE)

39



wherein R^{36} , R^{37} , R^{38} and R^{39} are each independently selected from hydrogen, halo or C_{1-4} alkyl;

X is $-SO_2-$ or $-CH_2CO-$;

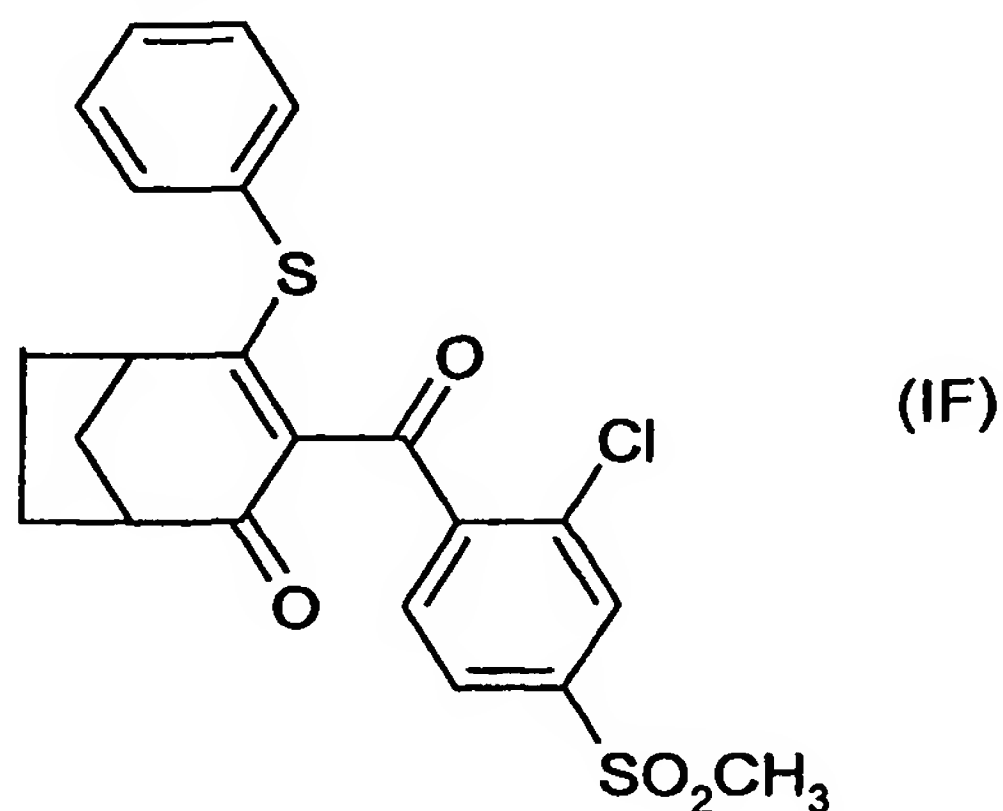
5 j is 2 or 3; and

k is zero or 1.

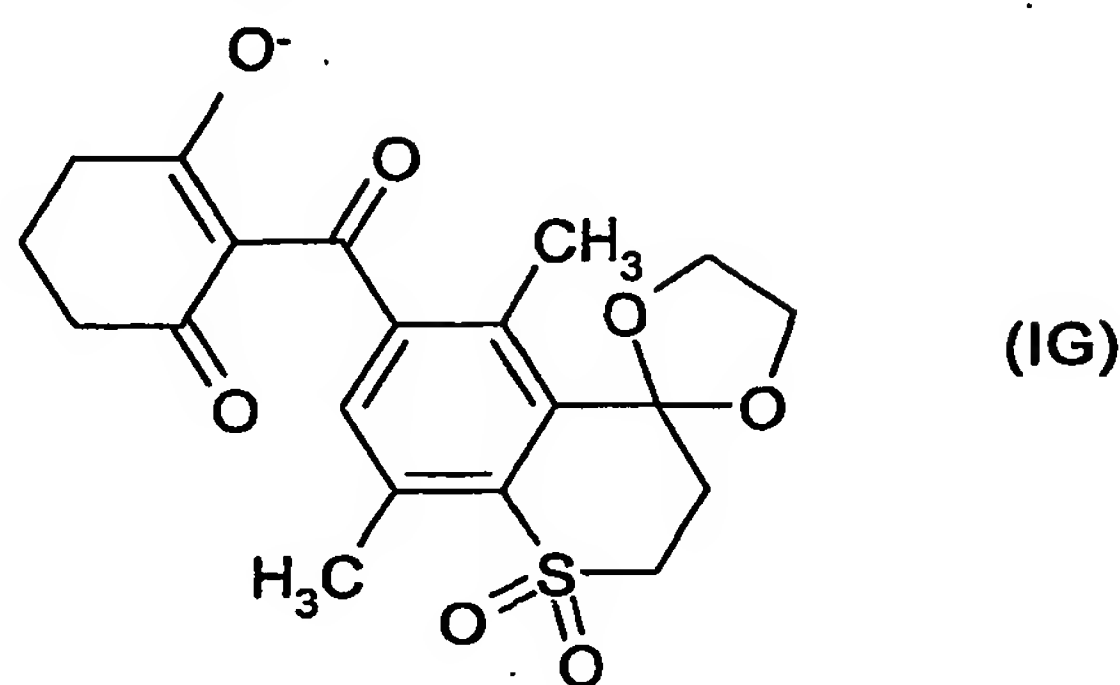
10. A pesticidally active combination according to claim 8, wherein R^{36} , R^{37} , R^{38} and R^{39} are each independently hydrogen, chloro or methyl.

10

11. A pesticidally active combination according to claim 2, wherein the HPPD-inhibiting herbicide is a compound of formula (IF)



12. A pesticidally active combination according to claim 2, wherein the HPPD-inhibiting herbicide is a compound of formula (IG)



13. A pesticidally active combination according to any preceding claim, wherein the agrochemically acceptable salt is formed using amines, alkali metal bases, alkaline earth metal cases, quaternary ammonium bases and metal chelates.
14. A pesticidally active combination according to any preceding claim, wherein the insecticide is selected from the group consisting of Abamectin, Acephate, Acetamiprid, Acrinathrin, Acrylonitrile, Alanycarb, Aldicarb, Aldoxycarb, Aldrin, Allethrin (1*R*-isomers), Allyxycarb, Alpha-cypermethrin, Phosphine (Aluminium Phosphide), Amidithion, Aminocarb, Amiton, Amitraz, Anabasine, Athidathion, Azadirachtin, Azamethiphos, Azinphos-ethyl, Azinphos-methyl, Azothoate, *Bacillus sphaericus*, *Bacillus thuringiensis*, *Bacillus thuringiensis* delta endotoxins, Barium polysulfide, Bendiocarb, Benfuracarb, Bensultap, Benzoximate, Beta-cyfluthrin, Beta-cypermethrin, Bifenthrin, Bioallethrin, Bioallethrin *S*-cyclopentenyl isomer, Biopermethrin, Bioresmethrin, Bistrifluron, Borax, Bromfenvinfos, Bromophos, Bromophos-ethyl, Bufencarb, Buprofezin, Butacarb, Butathiofos, Butocarboxim, Butonate, Butoxycarboxim, Cadusafos, Hydrogen cyanide, Calcium polysulfide, Camphechlor, Carbanolate, Carbaryl, Carbofuran, Carbon disulfide, Carbon tetrachloride, Carbophenothion, Carbosulfan, Cartap, Chlorbicyclen, Chlordane, Chlordecone, Chlordimeform, Chlorethoxyfos, Chlorfenapyr, Chlorfenvinphos, Chlorfluazuron, Chlormephos, Chloropicrin, Chlorphoxim, Chlorprazophos, Chlorpyrifos, Chlorpyrifos-methyl, Chlorthiophos, Chromafenozide, Clothianidin, Coumaphos,

Coumithoate, Crotoxyphos, Cruformate, Cryolite, Cyanofenphos, Cyanophos, Cyanthoate,
 Cycloprothrin, Cyfluthrin, Cyhalothrin, Cypermethrin, Alpha-cypermethrin, Beta-
 Cypermethrin, Theta-cypermethrin, Zeta-cypermethrin, Cyphenothrin, Cyromazine,
 Dazomet, Bromo-DDT, DDT, pp'-DDT, Decarbofuran, Deltamethrin, Demephion,
 5 Demephion-O, Demephion-S, Demeton, Demeton-O, Demeton-S, Demeton-methyl,
 Demeton-O-methyl, Demeton-S-methyl, Demeton-S-methylsulphon, Diafenthiuron,
 Dialifos, Diazinon, Dicapthon, Dichlofenthion, Dichlorvos, Dicrotophos, Dicyclanil,
 Dieldrin, Diflubenzuron, Dimefox, Dimethoate, Dimethrin, Dimethylvinphos, Dimetilan,
 Dinex, Dinotefuran, Diofenolan, Dioxabenzofos, Dioxacarb, Dioxathion, Disulfoton,
 10 Dithicrofos, DNOC, Emamectin, EMPC, Empenthrin, Endosulfan, Endothion, EPN,
 Epofenonane, Esfenvalerate, Ethiofencarb, Ethion, Ethoate-methyl, Ethoprophos, Ethylene
 dibromide, Ethylene dichloride, Etofenprox, Etrimfos, Famphur, Fenchlorphos, Fenethacarb,
 Fenfluthrin, Fenitrothion, Fenobucarb, Fenoxycarb, Fenpirithrin, Fenpropathrin,
 Fensulfothion, Fenthion, Fenvalerate, Fipronil, Flonicamid, Flucofuron, Flucycloxuron,
 15 Flucythrinate, Flucythrinate, Flucythrinate, Flufenprox, Flumethrin, Fluvalinate, Fonofos,
 Formetanate, Formothion, Fosmethilan, Fospirate, Fosthiazate, Fosthietan, Furathiocarb,
 Furethrin, gamma-HCH, GY-81, Halofenozide, Heptachlor, Heptenophos, Hexaflumuron,
 Hydramethylnon, Hydrogen cyanide, Hydroprene, Imidacloprid, Imiprothrin, Indoxacarb,
 IPSP, Isazofos, Isobenzan, Isodrin, Isofenphos, Isoprocab, Isopropyl O-
 20 (methoxyaminothiophosphoryl)salicylat, Isothioate, Isoxathion, Jodfenphos, Kelevan,
 Kinoprene, Lambda-cyhalothrin, Lirimfos, Lufenuron, Lythidathion, Phosphine, Malathion,
 Mazidox, Mecarbam, Mecarphon, Menazon, Mephosfolan, Mercurous chloride,
 Mesulfenfos, Metam, Methacrifos, Methamidophos, Methidathion, Methiocarb,
 Methocrotophos, Methomyl, Methoprene, Methothrin, Methoxychlor, Methoxyfenozide,
 25 Methyl bromide, Methyl isothiocyanate, Metolcarb, Metoxadiazone, Mevinphos,
 Mexacarbate, Milbemectin, Mipafos, Mirex, Monocrotophos, Morphothion, Naled,
 Nicotine, Nifluridide, Nitenpyram, Nithiazine, Nitrilacarb, Novaluron, Ölsäure, Omethoate,
 Oxamyl, Oxydemeton-methyl, Oxydeprofos, Oxydisulfoton, Parathion, Parathion-methyl,
 Pentachlorophenol, Permethrin, Petroleum Öl, Phenkapton, Phenothrin, Phenthoate, Phorate,
 30 Phosalone, Phosfolan, Phosmet, Phosnichlor, Phosphamidon, Phoxim, Phoxim-methyl,

Pirimetaphos, Pirimicarb, Pirimiphos-ethyl, Pirimiphos-methyl, Prallethrin, Primidophos, Profenofos, Promacyl, Promecarb, Propaphos, Propetamphos, Propoxur, Prothiofos, Prothoate, Pymetrozine, Pyraclofos, Pyrazophos, Pyresmethrin, Pyrethrins, Pyridaben, Pyridaphenthion, Pyrimidifen, Pyrimitate, Pyriproxyfen, Quinalphos, Quinalphos-methyl,
5 Quinothion, Resmethrin, Rotenone, RU 15525, Sabadilla, Schradan, Silafluofen, Sodium fluoride, Sodium hexafluorosilicate, Pentachlorophenol, Sophamide, Spinosad, Sulcofuron, Sulfluramid, Sulfotep, Sulfuryl fluoride, Sulprofos, Tau-fluvalinate, Tazimcarb, TDE, Tebufenozide, Tebupirimfos, Teflubenzuron, Tefluthrin, Temephos, TEPP, Terallethrin, Terbufos, Tetrachlorvinphos, Tetramethrin, Tetramethrin [(1*R*)- isomers], Thiacloprid,
10 Thiamethoxam, Thicofos, Thiocarboxime, Thiocyclam, Thiodicarb, Thiofanox, Thiometon, Thiosultap-sodium, Tolfenpyrad, Tralomethrin, Transfluthrin, Transpermethrin, Triazamate, Triazofos, Trichlorfon, Trichloronat, Tridec-4-enyl acetate, Trifenofos, Triflumuron, Trimethacarb, Triprene, Vamidothion, XMC, Xylylcarb, Spirodiclofen, Acetoprole, Fluacrypyrim, Pyridalyl, Noviflumuron, Flufenerim, Amidoflumet, Ethiprole, Acequinocyl,
15 Etoxazole, Bifenazate, Spiromesifen and ZXI 8901.

15. A pesticidally active combination according to any preceding claim, which comprises one or more additional active ingredients.

20 16. A pesticidally active combination according to claim 14, wherein the one or more additional active ingredients are herbicides and/or safeners.

17. A pesticidally active combination according to claim 15, wherein the one or more additional active ingredients are selected from the group consisting of atrazine,
25 terbutylazine, metolachlor, s-metolachlor, benoxacor, furilazole, dichlormid, flurazole acetochlor, p-dimethenamid, glyphosate, cloquintocet, fluxofenim, nicosulfuron, rimsulfuron, foramsulfuron, isoxadifene, prosulfuron, primisulfuron, dicamba, trifloxysulfuron.

18. A method of controlling undesired plant growth in crops of useful plants, said method comprising the application of a pesticidally active combination comprising an HPPD-inhibiting herbicide in the form of an agrochemically acceptable salt and an insecticide.

5

19. A pesticidally active pre-mix composition comprising an HPPD-inhibiting herbicide in the form of an agrochemically acceptable salt and an insecticide.